

IN THE CLAIMS

1 (Currently Amended). A method comprising:

forming a base contact in a semiconductor structure;
covering said semiconductor structure with a layer;
forming a tubular an electrical connection through said layer to said contact;
depositing an insulator within said electrical connection; ~~and~~
forming a cup-shaped heater electrically coupled to said tubular electrical

connection; and

forming a phase-change material over said layer, said material electrically coupled to said contact through said connection and said cup-shaped heater.

2 (Original). The method of claim 1 wherein covering said semiconductor structure with a layer includes covering said structure with at least one insulating layer.

3 (Original). The method of claim 2 including forming a passage through said insulating layer.

4 (Original). The method of claim 3 including forming the electrical connection through said passage.

5 (Original). The method of claim 4 wherein forming an electrical connection includes forming a cup-shaped electrical connection.

6 (Previously Amended). The method of claim 5 including filling said cup-shaped electrical connection with said insulator.

Claims 7 and 8 (Canceled).

9 (Currently Amended). The method of claim 1 & including forming a sidewall spacer in said cup-shaped lower electrode.

10 (Original). The method of claim 9 wherein forming a phase-change material includes depositing a phase-change material over said insulating layer and said spacer and electrically contacting said lower electrode.

Claims 11-36 (Canceled).

37 (Previously Amended). A method comprising:

- forming a base contact in a semiconductor structure;
- covering said semiconductor structure with a layer;
- forming a first cup-shaped electrical connection through said layer to said contact;
- forming a second cup-shaped connection layer over said first cup-shaped connection layer and an electrical communication therewith;
- forming a phase-change material over said second cup-shaped electrical connection layer, said phase-change material electrically coupled to said base contact by said first and second cup-shaped electrical connection layers; and
- filling said first cup-shaped electrical connection with an insulator.

Claim 38 (Canceled).

39 (Previously Amended). The method of claim 37 including forming a sidewall spacer in said second cup-shaped electrical connection.

40 (Previously Amended). The method of claim 39 including forming a phase change material by depositing a phase-change material over said layer and said spacer.